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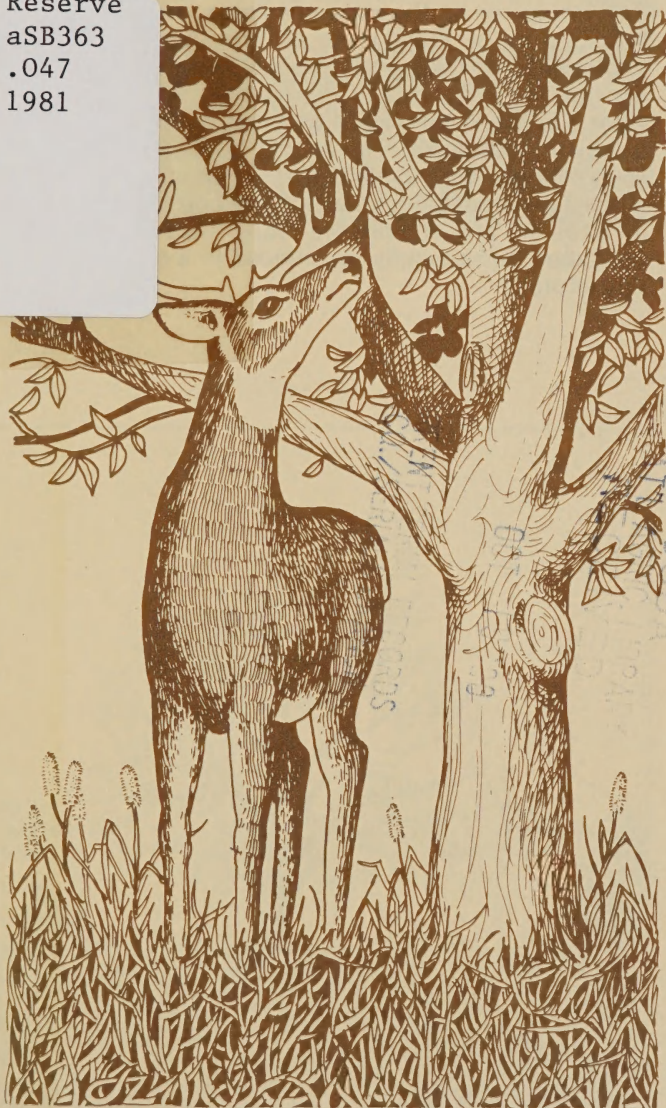


United States Department of Agriculture
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Care of Wild Apple Trees

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Care Of Wild Apple Trees

Wild apple trees are one of the important wildlife food plants in New England. They are used by many game species including white-tailed deer, ruffed grouse, snowshoe hare, cottontail rabbit, and gray squirrels. Apples or apple seeds have been found in the stomachs of fox, fisher, porcupine, bob cat, and red squirrel. Apple trees also provide good habitat for woodcock and many songbirds including blue birds, fly catchers, robins, and orioles. New England is fortunate in having many apple trees growing naturally in the wild, but many wild apple trees are being lost each year.

Wild apple trees normally become established in clearings or on the edges of fields, and as the forests grow up these trees are crowded by shrubs and shaded by over-topping trees. Prolonged periods of crowding and shading will cause a decline in vigor and eventually death and loss of these apple trees for wildlife use. The length of life, vigor, and yield of these wild apple trees can be improved with some simple techniques which are commonly used by foresters and orchardists today. This bulletin describes these simple techniques in a step-by-step procedure.

Instructions

Step 1.

Carefully examine the apple tree. Look for dead branches, diseased wood in the trunk, and the presence of more than one stem. If there is more than one stem, select the largest and most vigorous and remove the smaller competing stems by cutting them off as near the ground as possible. If the largest stem is badly diseased or broken, remove it and select the next largest, most vigorous stem for improvement.



Step 2.

Remove all other shrubs and trees back to the drip line of the apple tree. If the tree is shaded by large overtopping trees, remove these on at least three sides especially towards the south. Remove all the dead branches from the apple tree. Cut these off with pruning saw or pruning shears as close to the living branches as possible.



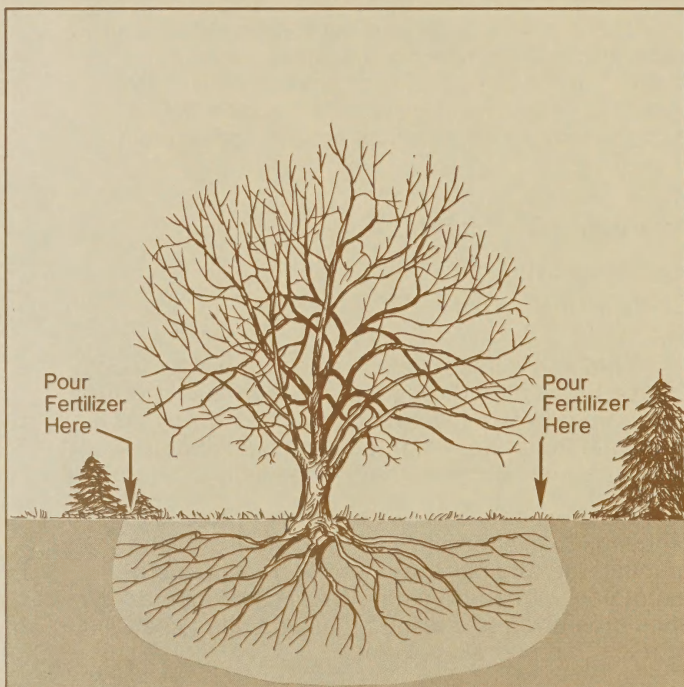
Step 3.

Remove approximately one third of the remaining live growth. In so doing, attempt to open up thick clusters of branches. Clip off one to two feet from the ends of vigorous side branches or vertical sucker shoots. Do not remove the short spur branches which grow on the sides of larger branches because these are the fruit-bearing branches. If the tree is a young sapling with few side branches, the top may be cut off to encourage branching.



Step 4.

Fertilize the tree by pouring a liquid solution of calcium nitrate or ammonium nitrate fertilizer in a narrow band around the tree directly below the drip line. Fertilizer in this narrow band will spread out and become available to the feeder roots as it seeps into the ground. Use five pounds of fertilizer for a large tree and three pounds for a medium-sized tree. For very small trees or saplings, use one pound of fertilizer at least three feet from the base of the tree.



Comments

A lightweight chain saw, a pruning saw with a ten-foot handle, and long-handled pruning shears are useful tools for working on wild apple trees. Fertilizer can be mixed in an ordinary pail or watering can with the sprinkler head removed.

The brush, apple-tree branches, and trees which are removed can be piled to form a brush pile for wildlife cover. This is especially effective where cottontail rabbits are abundant. A better brush pile is produced where brush is piled over rocks, stumps, or logs. For deer, ruffed grouse, and snowshoe hare, there is little need to pile the brush.

In grouse habitat, it may be helpful to leave dense conifer or brush growth close to the apple tree on one side for escape and roosting cover. Where possible, this should be on the north side of the tree.

If there are very large trees to be removed, it may be faster and safer to girdle the tree and leave it standing. Girdling is accomplished by cutting completely through the bark in a ring around the tree. Spraying the cut stumps of trees and brush with chemical herbicides will retard sprouting. Do not use chemical sprays on apple-tree stumps as they may be connected to the roots of the tree you wish to save.

The effects of fertilizing will last approximately three years but for maximum growth, the tree can be fertilized every year.

The minimum-size clearing for the health and vigor of the apple tree has been described in these instructions. Most species of wildlife benefit from clearings in brushy or wooded areas and would benefit from larger clearings around apple trees.

Additional Comments

Richard Roth

Clyde Hunt

Wild apple trees are an important winter food source for wildlife throughout the Northeastern Area. Apple trees provide ideal food patches which are perennial in nature. Wildlife become accustomed to their existence and use them, especially in winter.

Field experience has shown that there is a tendency to over prune wild apple trees. When pruning, the original shape of the tree should be maintained. When pruning old trees, consideration should be given to leaving limbs and dead sections of trees that contain cavities.

Crab apple trees also provide ideal winter food patches for wildlife. They produce abundant crops each year, with minimum pruning or fertilizing. Certain crab apple trees produce fruit that is highly attractive to wildlife. Some varieties produce fruit that stays on branches until early spring; this makes food available above the snow during the critical winter period.

The following are examples of varieties selected for fruit persistence and use by wildlife:

Variety	Place of Origin
Bobwhite (sargenti)	Boston, MA
baccata #33985	Rochester Parks, NY
ellwangeriana floribunda #3433	Rochester Parks, NY
Niska Nugget	Saratoga County, NY
Niska Gold	Saratoga County, NY
prunifolia rinki #516	Rochester Parks, NY
robusta #22338	Arnold Arboretum, MA

Scion material from these or other selections can be grafted onto seedlings or top grafted onto wild apple trees. Grafts of crab apples usually begin to flower and produce fruit the year after grafting. Most nurseries operated by State Divisions of Forestry have crab apple seedlings available in one or more of the above varieties.

All young apple trees must be protected from mice, rabbits, and deer. The stems of young trees should be protected with expandable plastic strips or 1/4 x 1/4-inch mesh hardware cloth. Wild animals will feed on freshly planted trees in preference to natural vegetation. They apparently recognize the added nutritional value of nursey grown stock.

U.S.D.A., NAL

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Cataloging Prep

This folder is a reprint of "Care of Wild Apple Trees," Extension Folder 70, published by the New Hampshire Cooperative Extension Service, Durham, N.H. Additional comments have been added by Richard Roth, wildlife biologist, and Clyde Hunt, geneticist, with the USDA Forest Service, Northeastern Area, Broomall, PA.



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